To Farmers and Dealers in Stock.

CIRCULAR A.

The act of 1877, constituting a State Board of Health, made it the duty of this Board "to make inquiries and reports in reference to diseases affecting animals and the methods of prevention." An act of the present Legislature gives additional power in reference to pleuro-pneumonia or other contagious diseases affecting animals. The State Board of Health directs this circular to be distributed.

The legislation of this State as to the diseases of animals, only has reference to preventing the spread of infectious or contagious diseases. When animals are seriously sick from any cause, the owner should make his own arrangements for skillful treatment. But when any infectious or contagious disease so far prevails as to threaten to become epidemic, the results which may accrue to citizens at large are so serious, that all governments recognize the right to investigate for the prevention or limitation, and to enact such restriction as those skilled in the management of epidemics may advise. This State has now placed this oversight within the jurisdiction of the State Board of Health, and thus imitates the custom of other countries.

## PLEURO-PNEUMONIA.

The chief infectious malady which has been considered as existing in this State is *Pleuro-Pneumonia*. It may be called lung-plague, but not cattle-plague, since the latter is the name for the very different disease, Rinderpest. That the disease is one which inclines to spread, is agreed by all authorities. Its very threatening justifies the expenditure of such an amount of money as may be necessary to determine its character and its extent. When discovered much depends on the severity of the type or the disposition it has shown to become epidemic.

It is not generally claimed that it ever occurs any more than small pox, except as it is transported from some previous case. This Board will at first seek to determine where infectious pleuropneumonia now exists. With a rigid regard to the trouble of quarantine, it will only exercise the power when the rights of the people require it. Such action, however annoying to the owner, is in his real interest. We propose not to give orders rashly; to enforce them when given.

Our trade, food supply and stock interests will be greatly aided

when, as we trust will soon be the case, we can free each owner from any suspicion of the disease among his cattle.

General Le Duc, the Commissioner of Agriculture, responds at once to our request for an active co-operation with us in stamping out this disease where it exists, and in settling, by expert aid, the question of its extent. In this, too, we are to have the counsel and support of the Executive Committee of the Board of Agriculture. A rapid sanitary inspection will at once be instituted at all places where it has recently prevailed. It is the duty of any owner having cause to suspect such a disease to send us notice.

The attack usually begins with coldness, and dry, hacking cough, with symptoms of pain and uneasiness. The animal refuses food. Milch cows diminish in milk. Even an unskilled man knocking with the fingers against the opposite sides, back of the shoulders, will detect the difference in sound of the two sides. Both the fever and heat are marked. Many of the symptoms correspond with pleurisy or pneumonia in man—with the same varied severity, and with either acute or chronic symptoms. If new cattle have come into the herd, or if the disease is prevalent near by, there is more ground for suspicion.

The owner must exercise close watch and honestly seek to know whether there is ground to suspect infection. In disputed cases the only way is to consent to submit it to skilled examination and inquiry, and not to make a positive diagnosis in matters in which the owner cannot expect himself to be fully competent.

On March 15th the secretary of this Board made a visit to a farm on the Delaware, opposite the New Jersey border, in order to examine into the symptoms of the disease, and to compare it with other lung diseases in man or animals. The account of the farmer was that three months previous he bought a cow which, a few days after, sickened and died. He has since lost twelve. His own account, and that of adjoining farmers, would, we think, satisfy most that the disease is infectious pleuro-pneumonia. The United States Veterinary Surgeon, the State Inspector of Pennsylvania, and other recognized authorities were present, by appointment. Physical examination of four animals showed each with one lung consolidated; three had been sick less than one week and one four weeks. Post-mortem examinations fully verified the diagnosis. The lungs were found increased from about two and a half to twenty pounds, with such changes as are now being microscopically examined. A cow had died of the same disease three days before at Camden. There can be no doubt that it exists more or less in this State, and still

more in Pennsylvania and Maryland, from which its ingress must be guarded.

It is strongly in the interest of the farmers and stock dealers of this State in every way to meet the facts and aid us in a speedy riddance of the malady. We propose to act in concert with them for the public welfare. There can be but one conclusion after due examination had—where the disease is found to exist, we must either isolate or quarantine, or give notice to others of the place where it exists, or notify the owner that he will be held accountable if any animal of others becomes infected by exposure to his herd. Where the veterinarians finds the disease it is better to kill the animal.

The fact of pleuro-pneumonia in an animal does not decide that it is unfit for food use. This is determined chiefly by the severity of the sickness.

All farms or herds in the State which have been adjudged to have had infectious pleuro-pneumonia should, as a preventive, keep the cattle this spring and summer in temporary sheds, so that the others can be thoroughly cleansed of all movable material and be well white-washed. It is best to add four ounces of dry chloride of lime to a gallon of the white-wash. In any case the cattle will be benefited by this removal from the yards, and the farmer's interest be promoted by the removal of all suspicion of the disease. It is a short-sighted policy for any one for a little present saving to subject his cattle to continued suspicion, or to an actual and prolonged existence of the malady.

As it is believed that the chief contagion comes from the lungs, it is best to sponge the mouth and nostrils of all well and exposed animals, twice each day, with a solution of chloride of zinc. The fifty per cent. solution (Squibb's) costs twenty-five cents per pound, and, diluted one-fourth, a tablespoonful of it suffices each time. Or it can be purchased solid in ounce bottles for eight cents, and dissolved in a half gallon of hot water. A little tar rubbed in the mouth also cleanses. Those about sick animals should wash their hands in the zinc solution. For various other disinfectants, see Third Report (or the last July circular) of the State Board of Health.

Every farmer who purchases new stock should, for a month, keep it apart from his herd while any infection is prevalent. No cattle should be allowed to pasture on commons, as this disease thus spreads in the summer. Read the law and the penalties you may incur by spreading the contagion. It is to be remembered, that animals, in order to health, need to be kept naturally; that they need right food, pure air, good water and exercise in order to be healthy. If well fed, and yet having neither

rubbing nor exercise, the result must be to breed disease. It is profitable to change stabled cattle from their stalls from time to time. Some diseases are made malignant or contagious by closeness and filth. It is for the interest of all owners to adopt those precautions which by the most successful dealers are regarded advantageous. Milk is a great absorbent of contagion. It is very important that it should not be kept standing in or near the yards, but the cans to receive it should be outside the pens and yards, and removed as soon as the milking is over.

As the present law extends to the care of all infectious diseases of animals, and has not single reference to any one disease or any single year, we shall hope to aid and to be aided by all those who rightly estimate the great pecuniary profit and personal comfort of prevalent good health among the lower animals. Cows kept after the packed-herring system, or tied all winter in a stall, will not maintain good health, and will stand ready for any epizoötic disease.

## PNEUMO-ENTERITIS.—(HOG CHOLERA.)

There is evidence that this disease prevails considerably in some parts of the State. The loss to this country last year was about twenty millions of dollars from this disease.

It is actively contagious. The name cholera deceives as to it, for it is a fever in which not only the intestines, but the lungs and glandular system are usually affected.

It commences with loss of appetite and constipation, the skin becomes reddened and often pimpled. Cough and hurried respiration as well as diarrhea are among the symptons. About seventy per cent. of the pigs die in two weeks, while those surviving are of little value. The time of catching is generally from five to fifteen days. The only method of dealing with it is the same as with pleuro-pneumonia, viz: the killing of all bad cases, isolation of the sick, and an entire removal to another pen of all well ones.

The Board will be glad to receive information as to any prevalent disease of animals, and will give to the subject such attention as it may demand.

Whenever any contagious or infectious disease has caused the death of any animal, or is believed to exist in any neighborhood, any person may properly state the fact to us.

Copies of the law can be had on application.

Letters or postals should be addressed,

State Board of Health, Trenton, N. J.